

## SPECIFICATION

## Methanol

for the Japanese Pharmacopoeia General Tests (for LC)

REQUIREMENT	SPECIFICATION
Description (JP)	Clear, colorless liquid
Absorbance (210nm) (JP)	not more than 0.70
Absorbance (220nm) (JP)	not more than 0.30
Absorbance (230nm) (JP)	not more than 0.15
Absorbance (240nm) (JP)	not more than 0.07
Absorbance (254nm) (JP)	not more than 0.02
* Absorbance (210nm)	max.0.60
* Absorbance (220nm)	max.0.30
* Absorbance (230nm)	max.0.15
* Absorbance (240nm)	max.0.06
* Absorbance (254nm)	max.0.015
* Absorbance (260~400nm)	max.0.01
* Peroxides (as H <sub>2</sub> O <sub>2</sub> )	max.5ppm
* Fluorescence test	to pass test
Description (USP-NF)	Clear, colorless liquid
Assay (USP-NF)	minimum 99.8%
Substances darkened by sulfuric acid (USP-NF)	passes test
Substances reducing permanganate (USP-NF)	passes test
Solubility in water (USP-NF)	passes test
Color (APHA) (USP-NF)	maximum 10
Water (H <sub>2</sub> O) (USP-NF)	maximum 0.1%
Residue after evaporation (USP-NF)	maximum 0.001%
Carbonyl compounds (USP-NF)	maximum 0.001% each of acetone, formaldehyde, and acetaldehyde
Titration acid (USP-NF)	maximum 0.0003meq/g
Titration base (USP-NF)	maximum 0.0002meq/g
Absorbance (280~400nm) (USP-NF)	maximum 0.01
Absorbance (260nm) (USP-NF)	maximum 0.04
Absorbance (240nm) (USP-NF)	maximum 0.10
Absorbance (230nm) (USP-NF)	maximum 0.20

Absorbance (220nm) (USP-NF)	maximum 0.40
Absorbance (210nm) (USP-NF)	maximum 0.80
Absorbance (205nm) (USP-NF)	maximum 1.00
Gradient elution (USP-NF)	passes test
Description (Ph.Eur.)	Clear, colourless liquid
Sp. Gr.(20/20°C) (Ph.Eur.)	0.791~0.793
Absorbance (210nm) (Ph.Eur.)	maximum 0.70
Absorbance (220nm) (Ph.Eur.)	maximum 0.30
Absorbance (230nm) (Ph.Eur.)	maximum 0.13
Absorbance (250nm) (Ph.Eur.)	maximum 0.02
Absorbance (260nm) (Ph.Eur.)	maximum 0.01
Content (Ph.Eur.)	minimum 99.8%
Absorbance (225nm) (Ph.Eur.)	maximum 0.17
* Appearance	Colorless clear liquid
Assay (CH <sub>3</sub> OH) (GC)	min.99.8%(mass/mass)
Solubility in water	to pass test
Density (20°C)	0.791~0.793g/ml
Refractive index 20°C	1.327~1.330
** Water	max.0.05%(mass/mass)
Residue after evaporation	max.5ppm(mass/mass)
Acidity (as HCOOH)	max.0.002%(mass/mass)
Alkalinity (as NH <sub>3</sub> )	max.3ppm(mass/mass)
Carbonyl compounds (as CO)	max.0.005%(mass/mass)
Ethanol (GC)	max.0.05%(mass/mass)
Substances darkened by sulfuric acid	to pass test
Substances reducing permanganate (as O)	max.5ppm(mass/mass)

This product is suited for Methanol for liquid chromatography of general tests on The Japanese Pharmacopoeia. (\*:Additional test performed by Wako)USP-NF Reagent Methanol, SpectrophotometricPh. Eur. Reagent Methanol, Methanol R1 and Methanol R2JIS K 8891:2006(\*\*:The specification is originally set by Wako)